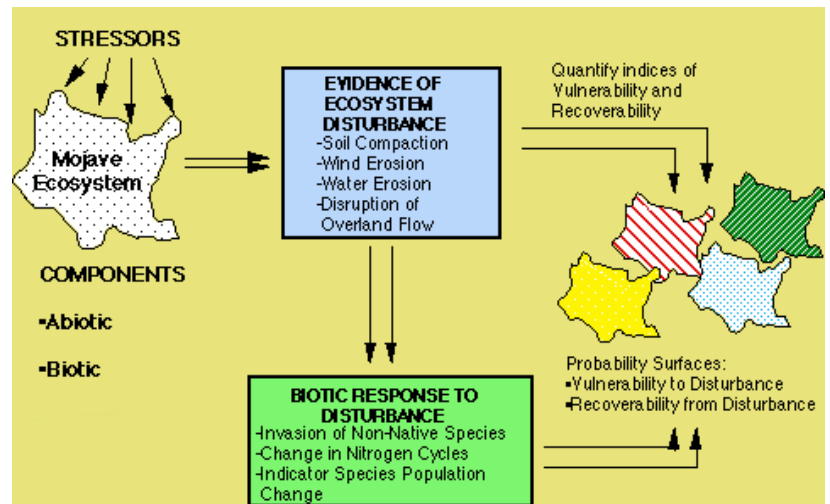




Where Desert Meets City: Vulnerability and Recoverability of the Mojave Desert Ecosystem

The Mojave Desert Ecosystem can no longer be treated as a wasteland. Home to 6 military bases, 4 national park units, and considerable BLM land, its population has grown to over a million people, and 40 million people live within a convenient drive. Land managers, organized in several formal groups, are calling for unbiased scientific input to help them balance competing demands, from locating utility corridors and waste disposal sites to managing habitat for endangered species. *Where Desert Meets City* is the USGS interdisciplinary science program for supporting land managers by projecting vulnerability and recoverability of the land to external stresses.

The strategy is to help desert managers achieve their adaptive management objectives with a rigorous, scientific approach. Starting with baseline data, much of which has been assembled by the Department of Defense Mojave Desert Ecosystem Program, local studies will be used to gain a deeper understanding of how surface processes interact with the biota. A key is to examine natural and human-induced variations, both locally and across the region. This knowledge will be extrapolated to the ecosystem using remote sensing techniques. Maps of vulnerability and recoverability for specific stresses and types of damage will be created by testing hypotheses based on knowledge of these fundamental processes. A monitoring strategy will be designed so that land management agencies can detect significant changes in key indicators of ecosystem health on a continuing basis.



Interdisciplinary work will proceed concurrently on all elements of the program, with increased understanding of processes from local studies contributing towards regional assessments and regional studies highlighting anomalies needing more intensive study. A partnership with the Department of Defense Strategic Environmental Research and Development Program will lead to development of a Decision Support System. Throughout, regular contact with land managing clients will keep the study focused and ensure that good science helps to develop good policy.

For more information, visit our World Wide Web site:

<http://geology.wr.usgs.gov/MojaveEco/>

Contact:

Leonard Gaydos

(650) 604-6368 lgaydos@usgs.gov

